



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. BOI 1450 Alexandria, Virginia 22313-1450 www.unto.gov

APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,457	08/29/2001		Jin-Oh Kwag	6192.0218.AA	5066
;	7590	09/16/2003			
McGuireWoods LLP				EXAMINER	
1750 Tysons Blvd Sutic 1800				RICHARDS, N DREW	
McLean, VA 22102			•	ART UNIT	PAPER NUMBER
				2815	
•				DATE MAILED: 09/16/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)						
	09/940,457	KWAG ET AL						
Office Action Summary	Examiner	Art Unit						
	N. Drew Richards	2815						
The MAILING DATE of this communication appears on the cover she t with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status								
1) Responsive to communication(s) filed on 29 A	lugust 2001 .							
2a)☐ This action is <b>FINAL</b> . 2b)⊠ Thi	s action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims								
4)⊠ Claim(s) <u>1-8</u> is/are pending in the application.								
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-4,7 and 8</u> is/are rejected.								
7)⊠ Claim(s) <u>5,6</u> is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9)☐ The specification is objected to by the Examiner.								
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12)☐ The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)☐ All b)☐ Some * c)⊠ None of:								
<ol> <li>Certified copies of the priority documents have been received.</li> </ol>								
2. Certified copies of the priority documents have been received in Application No								
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informa	ary (PTO-413) Paper No(s) Il Patent Application (PTO-152)						

Application/Control Number: 09/940,457 Page 2

Art Unit: 2815

#### **DETAILED ACTION**

## **Priority**

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Korea on 8/29/00. It is noted, however, that applicant has not filed a certified copy of the KR 2000-50546 application as required by 35 U.S.C. 119(b).

#### Claim Objections

2. Claims 1, 5 and 7 are objected to because of the following informalities: Claim 1 line 6 should read "the intersection" as the intersection has previously been claimed in line 4. Claim 5 line 3 should read "and an outline of the internal projection is encircled by an outline". Claim 7 line 1 should read "an outline" and line 2 should read "an outline". Appropriate correction is required.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2815

4. Claims 1-4 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (U.S. Patent No. 6,469,764 B1).

Kim et al. disclose a panel for a liquid crystal display in figures 2 and 3 for example. Kim et al. disclose an insulating substrate 20, a first wire 21 formed on the insulating substrate 20, a second wire 22 intersecting the first wire, the second wire 22 insulated from the first wire 21 as taught on column 6 lines 49-53, a pixel electrode 25 in a pixel area defined by the intersection of the first wire and second wire, a domain-defining member provided over the insulating substrate, and a shading film 24 formed over the insulating substrate. The domain-defining member is the projections 25b of the pixel electrode and the openings formed between projections 25b. The shading film has a plane view different from the domain-defining member and overlaps the domain-defining member at least in part.

With regard to claim 2, the domain-defining member comprises projections 25b projecting outward from pixel electrode 25.

With regard to claim 3, the pixel electrode has an opening pattern between sections 25b and the domain-defining member comprises the opening pattern.

With regard to claim 4, the domain-defining member comprises the projections and openings of the pixel electrode.

With regard to claim 7, an outline of a portion of the domain-defining member overlapping the shading film is encircled by an outline of the shading film.

Application/Control Number: 09/940,457 Page 4

Art Unit: 2815

5. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Rho et al. (U.S. Patent No. 6,057,896).

Rho et al. disclose a panel for a liquid crystal display in figures 2 and 3 for example. Rho et al. disclose an insulating substrate 10, a first wire 21 formed on the insulating substrate, a shading film 30 formed on the insulating substrate and being apart from the first wire, a first insulating film 40 formed on the first wire and the shading film, a second wire 81 formed on the first insulating film, a second insulating film 100 formed on the second wire and the first insulating film, and a pixel electrode 140 formed on the second insulating film and the insulating substrate connected to a portion of the second wire, wherein the pixel electrode has a height difference ranging from a height of the insulating substrate to a height of the shading film, first insulating film and second insulating film.

## Allowable Subject Matter

- 6. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter: Prior art of record fails to teach, disclose, or suggest, either alone or in combination, the projection comprising an internal projection and a peripheral projection

Art Unit: 2815

around the pixel area where an outline of the internal projection is encircled by an outline of the shading film.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee et al. (U.S. Patent No. 6233034 B1), Lee et al. (U.S. Patent No. 6449025 B2), Lien et al. (U.S. Patent No. 5309264), Koma (U.S. Patent No. 6229589 B1), Lee et al. (U.S. Patent No. 6549252 B1), Okada et al. (U.S. Patent No. 6542211 B1), Lee et al. (U.S. Patent No. 6512565 B1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Drew Richards whose telephone number is (703) 306-5946. The examiner can normally be reached on M-F 8:00-5:30; Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor. Eddie Lee can be reached on (703) 308-1690. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308soll

0956.

NDR